

Remarks:

Reconsideration of the application, as amended herein, is respectfully requested.

Claims 1, 5, 7 - 11 and 22 - 24 are presently pending in the application. Claims 1, 9, 10 and 22 - 24 have been amended.

In item 1 of the above-identified Office Action, claims 1, 5, 7 - 11 and 22 - 24 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over French Patent No. 470,543 to Bourdin ("BOURDIN"), in view of U. S. Patent No. 4,014,234 to Spengler ("SPENGLER"), and further in view of U. S. Patent No. 5,526,726 to Shore et al ("SHORE")

Applicants respectfully traverse the above rejections, as applied to the amended claims.

More particularly, claims 1 and 10 have been amended to recite, among other limitations:

for a given press speed, said control unit causing said cylinders to be rotated faster and decreasing an angle of said cylinders relative to the ribbon, in order to increase the cutting lengths of the ribbon.  
[emphasis added by Applicants]

This amendment is supported in the instant application, for example, in paragraph [0024] which states in part:

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If the angle  $\alpha$  of the cylinders 2, 3 in relationship to the ribbon 1 is decreased (the cylinders 2, 3 are oriented more parallel to the ribbon 1), the cylinders 2, 3 are rotated faster for a given press speed to maintain a straight cut. Reorienting the cylinders 2, 3 in this direction results in a longer cut-to-cut length of the ribbon 1.

It can be seen in view of the foregoing, that the claims of the instant invention clearly tie the rotational speed of the cylinders and the angle of the cylinders relative to the ribbon, such that they are altered together in order to increase or decrease the cutting length of the ribbon.

The combination of BOURDIN, SPENGLER and SHORE neither teaches, nor suggests, the above limitations of Applicants' claimed invention, among others.

More particularly, the Office Action admits that BOURDIN:

... fails to disclose a sub-frame having a pivot point, the subframe supports the cylinders, the sub-frame controlling a position of the cylinders in regards to the work piece, a further drive connected to the sub-frame for pivoting the sub-frame about the pivot point, a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder, a second drive rotates and mounts to the second cylinder, the first and second drives are motors, and the first and second drives are gears, a sensor connected to the control unit and disposed in the travel path of the work piece, providing control signals to the control unit for controlling operation of the cylinders and monitoring the cutting operation, the sensors detect an unacceptable cut, and that the control unit is a microprocessor." [emphasis added by Applicants]

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As such, it can be seen that BOURDIN neither teaches, nor suggests the above limitations of Applicants' amended claims, among others.

Rather, the Office Action points to SPENGLER as allegedly disclosing a sub-frame having a pivot point, including a drive for pivoting the sub-frame about a pivot point and a control unit connected to and controlling the further drive and the one drive for controlling a rotational speed of the first cutting cylinder, among other things. As such, the Office Action uses SPENGLER to allegedly modify BOURDIN and, allegedly, disclose Applicants' claimed sub-frame, drives and control unit. Applicants respectfully disagree.

Rather, in SPENGLER, the sheet material is advanced with a constant speed and the length of the cut pieces is controlled by varying the duration of the drive of the cutting rollers, which is achieved by controlling the drive and the brake elements, respectively. See, col. 6 of SPENGLER, lines 42 to 49, which states:

Thus, the size of the finished blank may be determined by the control of the clutch and brake elements as described above. For example, if a smaller blank is to be cut, as indicated by the thinner line 80, the control of the brake and clutch will be adjusted accordingly, while moving the sheet material with a

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constant speed in the feed advance direction.  
[emphasis added by Applicants]

This means that, in SPENGLER, in order to obtain a longer signature, the clutch of SPENGLER must be disengaged for a longer period of time, so that - when seen over an entire cycle of rotation, the rotational speed of the cylinder is decreased and the helical knife hits the sheet passing by at a later point in time.

Contrary to the operation of SPENGLER, Applicants' claimed invention requires, among other things, that the rotational speed of the cylinder be increased, at the same time that the angle of the cylinders relative to the web is decreased, in order to obtain an increase in signature length.

None of the references BOURDIN, SPENGLER or SHORE, teach or suggest this limitation, among others, of Applicants' amended claims.

Further, with regard to the angular adjustment of the cutting roller position, SPENGLER only discloses altering the angle of the cutting rollers in order to vary the shape of the cut work pieces (i.e. to a trapezoidal shape). See, col. 5 of SPENGLER, lines 23 - 35. As such, SPENGLER neither teaches,

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nor suggests varying the angle of the cylinders in order to  
change the signature length.

Neither BOURDIN, nor SHORE (cited for allegedly disclosing a sensor), makes up for the above described deficiencies of the SPENGLER reference. As such, it is believed that Applicants' amended claims are patentable over the cited references, taken alone, or in combination.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1 and 10. Claims 1 and 10 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 or 10.

In view of the foregoing, reconsideration and allowance of claims 1, 5, 7 - 11 and 22 - 24 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

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Additionally, please consider the present as a petition for a one (1) month extension of time, and please provide a one month extension of time, to and including, February 21, 2006 to respond to the present Office Action.

The extension fee for response within a period of one (1) month pursuant to Section 1.136(a) in the amount of 120.00 in accordance with Section 1.17 is enclosed herewith.

Please provide any additional extensions of time that may be necessary and charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner, Greenberg, Stemmer, L.L.P., P.A., No. 12-1099.

Respectfully submitted,

  
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For Applicants

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